REMARKS

Reconsideration is respectfully requested.

Claims 30 through 51 remain in this application. Claims 1 through 29 have previously been cancelled. No claims have been withdrawn. Claims 52 and 53 have been added.

Paragraphs 1 and 2 of the Office Action

Claim 39 has have been rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1 through 12 of U.S. Patent No. 6,078,312.

Submitted herewith is a terminal disclaimer for the present patent application with respect to U.S. Patent No. 6,078,312, and therefore is it submitted that the judicially created doctrine of obviousness-type double patenting rejection is overcome.

Withdrawal of the §102(b) rejection of claim 39 is therefore respectfully requested.

Paragraphs 3 and 4 of the Office Action

Claims 30 and 31 have been rejected under 35 U.S.C. Section 103(a) as being unpatentable over Joyce in view of Victor.

Claim 30 requires, in part, "a mouse pointing device positionable over a surface having a plurality of uniquely coded positions arranged in a gradient substantially covering the surface, the device sensing the coding of the uniquely coded position underneath the mouse and conveying to the computer information relative to the uniquely coded position underneath the mouse", and claim 31 similarly (but not identically) requires "the surface having a plurality of uniquely coded positions arranged in a gradient, the mechanism adapted to detect the uniquely coded position underneath the

mechanism and to transmit information relative to the uniquely coded position".

The rejection of claims 30 and 31 are now based upon the allegedly obvious combination of the Joyce patent with the Victor patent. With respect to the Joyce patent, it was previously noted that Joyce describes a surface utilizing "an irregular spaced pattern of lines defining a rectilinear grid" and provides example of how such a grid may be defined using lines having different reflectivity, differing widths, irregular checkerboard patterns etc. See, e.g., Joyce at column 3, lines 11-44:

> The tablet illustrated in FIGS. 1 and 3 utilizes an irregularly spaced pattern of lines defining a rectilinear grid. These lines form two families 14 and 16 aligned, respectively, parallel to "x" and "y" axes. Although a rectilinear pattern of lines is shown; other coordinate axis systems, for example polar, may be utilized. In the preferred embodiment the lines are formed of a material reflective to infrared light and may be printed, screened, or otherwise affixed to, or within, the transparent medium defining tablet 12. Alternatively, the tablet may be defined by an irregular checker-board pattern of regions having distinct reflective indicies whereby the transition between adjacent regions generally corresponds to the lines 14 or 16 of the preferred embodiment.
>
> It is advantageous from the standpoint of the numerical position calculation to distinguish between "x-lines" and "y-lines". Therefore, y-lines 14 and x-lines 16 are preferably formed of material having differing reflective or luminant responses thereby resulting in correspondingly distinctive video levels as measured by the light sensing arrays (discussed below) of mouse 10. Alternatively, different width lines may be utilized for each family of lines 14,16, again, creating distinct video levels to facilitate line family identification. Finally, separate x and y line patterns may be adopted whereby the family identity of each line comprising a detected sequence of lines can be uniquely ascertained. In such a case, x and y lines of the same width and reflectivity may be used. In the preferred embodiment described hereinafter, line families of differing reflective characteristics are utilized whereby family membership is readily determined without resort to unique x and y line spacing patterns.

Clearly, and as conceded in the Office Action, the Joyce patent does not teach "a plurality of uniquely coded positions arranged in a gradient". It is thus alleged in the Office Action that the Victor patent teaches this

requirement of the rejected claims, and specific reference is made in the rejection to the Victor patent at col. 4, lines 46 through 62, which states:

> FIG. 4 shows a portion of the grid pattern 16 on surface 13. Grid pattern 16 is made up of two intersecting orthogonal sets of grid lines, including a set of horizontal grid lines, such as lines 37 and 39, and a set of vertical grid lines, such as lines 41 and 43, and is also made up of spaces 45 defined between the grid lines. Grid lines are of a first color, while spaces are of a second color contrasting with a first color. Thus, grid lines may be reflective or white and spaces may be absorptive or black, or vice versa. The boundaries 47 between grid lines and spaces need not be sharply defined, although this is preferred, provided a sufficient contrast ratio exists between lines and spaces so as to be detectable. In producing the grid pattern, the entire surface 13 may start as a reflective area. Glossy white paper or mylar may be used. Colored inks or dyes may then be used to print the lines.

However, it is submitted that the Victor patent does not disclose "a plurality of uniquely coded positions arranged in a gradient", and instead discusses a grid formed of a lines of "a first color", and the spaces between the lines of "a second color". It is submitted that this does not come any closer to the requirements of claims 30 and 31 than the Joyce patent, as a grid of lines and spaces is simply described.

The Office Action concludes:

> Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kirsch [sic - Joyce] with the cursor position control system, as disclosed by Victor. Doing so would provide a compact optical mouse, which determine relative motion between the mouse and the grid regardless of their relative positions.

However, the Office Action must provide specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings and must explain the reasoning by which the evidence is deemed to support such a finding. In re Sang Su Lee, 277 F.3d 1338, 61 USPQ2d 1430 (Fed. Cir. 2002). The Office Action states that the motivation to combine Victor with Joyce is to "provide a compact optical mouse, which determine relative motion between the mouse and the grid regardless of

their relative positions." It is respectfully submitted that given the actual teachings of the references, the cited motivation to combine is not found in the references themselves. The cited references do not state that their purpose or benefit is to provide a more compact optical mouse, or that the modification of the express teaching of the Joyce device with the selected portion of the Victor system would provide such a benefit, and it is respectfully submitted that the quoted statement from the Office Action is merely a conclusory statement of belief and not specific objective evidence of a motivation to combine.

It is therefore submitted that the cited patents, and especially the allegedly obvious combination of Joyce and Victor set forth in the rejection of the Office Action, would not lead one skilled in the art to the applicant's invention as required by claims 30 and 31.

Withdrawal of the §103(a) rejection of claims 30 and 31 is therefore respectfully requested.

CONCLUSION

In light of the foregoing amendments and remarks, early reconsideration and allowance of this application are most courteously solicited.

Respectfully submitted,

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